22. A data readout apparatus, comprising

a laser illuminating device illuminating data bits of tracks of an optical disk with an input data modulated beam; and

an accumulator accumulating, in correspondence to the tracks, a beam reflected from the optical disk

23. An apparatus for parallel readout of patterns stored as data in a plurality of disk tracks on an optical disk, said apparatus comprising:

a weight and modulated input data beam, encoded with external data and having a trapezoidal shape, and projected onto the optical disk as the optical disk rotates producing a reflection beam encoded with data products of the patterns and the external data; and

a receiving device, which receives the data products and sums the data products encoded in the reflection beam for each disk track.

24. The apparatus of claim 23, further including:

a meaasuring device, coupled to said receiving device, for measuring the accumulated current associated with each pattern; and

a computing device, coupled to said measuring device, for determining which pattern has the highest correlation with external data.

25. The apparatus of claim 23, further including:

a sign beam encoded with sign bits associated with the components of the external data which is projected onto the rotating optical disk to produce a sign reflected beam.

26. A method of correlating data, said method comprising the steps of:

modulating a beam with input data;

reflecting the beam off of multiplied bits of an optical disk; and

accumulating the beam reflected from the disk as the disk rotates.

27. An apparatus for parallel readout of patterns stored as data on an optical disk, said apparatus comprising:

a radial modulated input beam, encoded with external data, and projected onto the optical disk as the optical disk rotates producing a reflected beam encoded with data products of the patterns and the external data; and

a receiving device receiving the reflected beam encoded with the data products.

28. An apparatus for parallel readout and correlation of patterns stored as data on an optical disk having a supertrack, said apparatus comprising:

a laser beam generator for generating a laser beam:

a first lens for focusing the laser beam;

a modulator responsive to the laser beam from the first lens and to the external

data for modulating the laser beam as a function of the external data to produce a modulated input data beam;

a second lens for spreading the modulated input data beam to form a radial beam and projecting the radial beam onto the supertrack of the optical disk, and producing respective data products of each pattern and the external data encoded in a reflected beam; and

a receiving array for detecting respective data products of each pattern and external data encoded in the reflected beam and producing respective currents based on the respective data products.

29. The apparatus of claim 28 further including:

a filtering device responsive to the respective currents from said receiving array for producing real and imaginary components of the respective currents:

a measuring device, coupled to said receiving device, for measuring the respective currents associated with each pattern; and

a computing device, coupled to said measuring device, for determining which pattern has the highest correlation with the external data.

30. A method for parallel readout and correlation of patterns stored as data in supertracks on an optical disk, said method comprising the steps of:

simultaneously multiplying patterns stored in each of the supertracks on the optical disks with external data encoded in a light beam to produce a reflected beam encoded

with data products; and

detecting the data products encoded in the reflected beam for each supertrack.

31. A method for parallel readout and correlation of patterns stored as data in supertracks of an optical disk, said method comprising the steps of:

generating a laser beam;

modulating the laser beam with external data to produce a modulated input data beam;

shaping the modulated input data beam into a radial beam;

projecting the radial beam onto the optical disk to produce data products of the patterns and the external data encoded in the reflected beam; and

detecting the data products encoded in the reflected beam for each supertrack.

32. The method of claim 30 further including the steps of:

filtering the DC components from the data products encoded in the reflected beam;

separating the AC components encoded in the reflected beam into a real component and an imaginary component; and

calculating which pattern has the highest correlation with the external data.